

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 411951-237	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 03/ 00755	International filing date (day/month/year) 10/01/2003	(Earliest) Priority Date (day/month/year) 23/01/2002
Applicant INTERMEC IP CORP.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☐ the text is approved as submitted by the applicant.

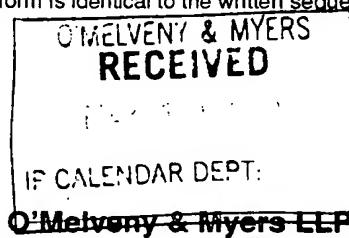
☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.



File: 0411951 - 237
 Action Item: Vol Amended/Abstract
 Date Due: 6/15/03
 Critical Date: _____
 Attorney Path: BMB MM
 Docketed By: 5/20/03
 Verified By: PR

1
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 03/00755

Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The present invention provides an RFID transponder that includes a state holding cell(24) that maintains the present state of the RFID transponder during temporary losses of power. After power is restored to the RFID transponder, the state holding cell restores the present state to the RFID transponder so that transactions with an RFID interrogator can continue without having re-transmit redundant commands. The RFID transponder further comprises an RF front end(14) adapted to receive an interrogating RF signal. An analog circuit(18) is coupled to the RF front end and is adapted to recover analog signals from the received interrogating RF signal. The analog circuit provides state information defining a desired state of the RFID transponder corresponding to the analog signals. A digital state machine(20) is coupled to the analog circuit and adapted to execute at least one command in accordance with the state information. A memory(22) is coupled to the digital state machine and is adapted to store and retrieve digital data responsive to the at least one command executed by the digital state machine. A power capacitor(16) is coupled to the RF front end and derives a voltage rectified from the interrogating RF signal to charge the power capacitor. The power capacitor thereby provides electrical power for the analog circuit, the digital state machine and the memory. The state holding cell(24) is coupled to the analog circuit and the digital state machine and is adapted to maintain the state information during a loss in power provided by the power capacitor due to lapse in receipt of the interrogating RF signal by the RF front end.

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 03/00755

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06K19/07 G06K7/00 H04B1/38 G01V15/00 G08B13/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06K H04B G01V G08B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 173 899 B1 (ROZIN ALEXANDER) 16 January 2001 (2001-01-16) column 3, line 65 -column 4, line 21; figure 1 ---	1,7-15, 21-24
X	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 09, 30 September 1997 (1997-09-30) & JP 09 135481 A (TOKAI RIKI CO LTD), 20 May 1997 (1997-05-20) abstract ---	1,7-15, 21-24
A	GB 2 333 495 A (PLESSEY TELECOMM) 28 July 1999 (1999-07-28) page 2, paragraph 2; figures page 8, line 11 - line 21 page 14, line 17 -page 15, line 3 --- -/--	1-24

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

2 May 2003

Date of mailing of the international search report

15/05/2003

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/00755

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 39 07 519 A (TEXAS INSTRUMENTS DEUTSCHLAND) 20 September 1990 (1990-09-20) column 1, line 8-10, 22-34, 44-50 column 2, line 37-43 column 3, line 29-33 ---	1-24
A	US 5 214 409 A (BEIGEL MICHAEL L) 25 May 1993 (1993-05-25) column 2, line 13 - line 23 column 5, line 19 - line 23; figure 1 -----	1-24

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/US 03/00755

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6173899	B1	16-01-2001	NONE
JP 09135481	A	20-05-1997	NONE
GB 2333495	A	28-07-1999	GB 2333493 A 28-07-1999 AU 2179399 A 09-08-1999 AU 2179599 A 09-08-1999 WO 9938108 A1 29-07-1999 WO 9938109 A1 29-07-1999
DE 3907519	A	20-09-1990	DE 3907519 A1 20-09-1990 AT 98409 T 15-12-1993 DE 69004999 D1 20-01-1994 DE 69004999 T2 21-04-1994 DK 386718 T3 14-02-1994 EP 0386718 A2 12-09-1990 US 5283529 A 01-02-1994
US 5214409	A	25-05-1993	AT 220816 T 15-08-2002 AU 665797 B2 18-01-1996 AU 3234393 A 28-06-1993 DE 9218817 U1 26-10-1995 DE 69232683 D1 22-08-2002 DE 69232683 T2 27-03-2003 DK 615645 T3 11-11-2002 EP 1251452 A1 23-10-2002 EP 0615645 A1 21-09-1994 ES 2076132 T1 01-11-1995 JP 7504771 T 25-05-1995 PT 615645 T 31-12-2002 US 5257011 A 26-10-1993 WO 9311517 A1 10-06-1993